## **DISCUSSION OF THE AMENDMENT**

Claims 1, 3-5, 7-8, 10-19, 29, 37-39 and 41-42 are pending in the present application. Claims 2, 6, 9, 20-28, 30-36 and 40 are cancelled claims. Independent Claims 1, 35 and 36 are amended herein to include the limitations of previous dependent Claim 40. Independent Claims 1, 35 and 36 are further amended to require that the gel depilatory composition must have a minimum viscosity of 500,000 mPa·s. Support for the amendment is found on page 28, line 4 of the specification.

No new matter is added.

## **REMARKS/ARGUMENTS**

In paragraph no. 8 on page 6 of the December 5, 2006 Office Action the Office rejected Claims 1, 3-5, 7-8, 10-22, 29-36 and 40-42 as obvious in view of Hori (U.S. 4,830,633).

The present claims require that the gel depilatory composition recited in Claim 1 has a viscosity of 500,000-20,000,000 mPa·s. The Office acknowledged that the minimum viscosity of the present claims is substantially greater than the maximum viscosity of the Hori compositions (see the comments further below quoted from the Office Action). In this regard Hori discloses:

The depilatory agent ... is designed such that the viscosity is 0.1 to 1,000 poises (at 30°C) and preferably 0.2 to 100 poises (at 30°C).

See column 2, lines 33-54 of Hori.

The Office argued that because <u>Hori</u> discloses a maximum viscosity of 1,000 poise (i.e., equivalent to 100,000 mPa·s), the present claims are obvious even though the present claims require a minimum viscosity of 300,000 mPa·s. The Office's argument is reproduced below for convenience.

Hori differs from the instant claim in the viscosity of the Hori gel is from 0.1 to 1,000 poise at 30°C (column 2, line 53), which is from 10 mPa·s to 100,000 mPa·s or a preferred viscosity of 0.2 to 100 poise (20 mPa·s to 10,000 mPa·s), while the claimed viscosity is 300,000 mPa·s. Hori contemplates a 10,000 fold increase from going from 10 mPa·s to 100,000 mPa·s or 500 fold increase from going from 20 mPa·s to 10,000 mPa·s for the preferred range. Further, the claimed viscosity is three times the viscosity of the Hori gel at the upper end. Gleaning from applicant's specification, a range of viscosity from 100,000 to 20,000,000 mPa·s (page 7, right column, lines 4 and 5 of the published application) is contemplated, which is a 200 fold from going from 100,000 to 20,000,000 mPa·s. There is no demonstration that a specific viscosity of the gel composition provides unusual/unexpected result to the composition.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the gel formulation of Hori, having a viscosity in the range of 10 mPa·s to 100,000 mPa·s in the method of Hori to remove hair. One having ordinary skill in the art would have been motivated to use a gel formulation to remove hair where the gel composition ahs a viscosity that is 10,000 or 500 fold the viscosity of the Hori gel at about between 100,000 and 1,000,000,000 mPa·s or 10,000 to 5,000,000 mPa·s preferred, with the expectation that the gel would effectively remove hair. The upper limits of the general range and the preferred range are greater than the recited 300,000 mPa·s as in claim 1 and 5,000,000 lies within the range recited in claim 40. In the absence of factual evidence, a gel having a viscosity of 300,000 mPa·s is not inventive over a gel having a viscosity of 100,000 mPa·s and which may be increased 500 or 10,000 fold.

See the first full paragraph on page 8 and the paragraph bridging pages 8 and 9 of the December 5 Office Action.

Applicants submit that the Office's argument, reproduced above, makes absolutely no sense whatsoever. To the extent that the Office's argument is comprehensible, it appears that the Office is arguing that it would be obvious to increase the maximum viscosity described for the Hori gels (i.e., 100,000 mPa·s) by a multiple that is within the multiple representing the difference between the minimum viscosity and maximum viscosity of Hori. Such an argument is entirely unsupportable by any basis in patent law or any reasoned technical argument.

Moreover, Comparative Examples 1 and 2 of the present specification show that using a composition having a viscosity of less than 100,000 mPa·s provides significantly inferior results (see Comparative examples 1 and 2 on page 36 and in the Table on page 37).

Comparative examples 1 and 2 include gel depilatory compositions having viscosities of 10,000 and 50,000 mPa·s, respectively. Comparative examples 1 and 2 provide inferior performance. For example, the comparative gel depilatory agents are difficult to apply, have

difficult adhesion to the skin, unacceptable odor and are inferior in their ability to be removed from the skin (see the performance results in the last 5 rows of the Table on page 37).

The effect of viscosity on the performance of a gel depilatory sheet is further illustrated by the Declaration submitted under 37 C.F.R. §1.132. The Declarant, Dr. Yoshihiko Watanabe, declares that a gel depilatory sheet of the invention, i.e., a sheet having gel depilatory composition having a viscosity of from 500,000 mPa·s to 20,000,000 mPa·s, is able to stick to the skin of a user (see paragraph no. 8 of the Declaration) whereas a polymer solution having a viscosity of only 155,000 mPa·s flows and cannot be maintained on the skin. The effect of viscosity is shown in photographs submitted together with the Declaration.

Applicants submit that the Declaration provides evidence that viscosity is a critical feature of the invention and that a composition having a viscosity of only 100,000 mPa·s, i.e., the viscosity of the closest prior art, is unable to provide an effective gel depilatory sheet.

Applicants submit that the rejection of the present claims as obvious in view of <u>Hori</u> is not supportable and the rejection should be withdrawn.

Independent Claims 1, 35 and 36 are amended to include the subject matter of previously presented Claim 40 and to require a minimum viscosity of 500,000 mPa·s. The Office rejected Claims 35 and 40 under 35 U.S.C. § 112 alleging that Claims 35 and 40 represent new matter. With regard to Claim 40, the Office alleged that a viscosity range of 300,000 to 20,000,000 mPa·s is not supported by the specification as filed.

Applicants draw the Office's attention to the paragraph bridging pages 27 and 28 of the specification, reproduced in part below for convenience:

The viscosity of the gel depilatory composition of the present invention, namely the value measured according to the following method is preferably 100,000 mPa·s or more, more, preferably 300,000 mPa·s or more and particularly preferably 500,000 mPa·s or more. The upper limit of the viscosity is preferably 20,000,000 mPa·s or less, more preferably

15,000,000 or less and particularly preferably 10,000,000 mPa·s or less.

As is clear from the above-quoted disclosure of the present specification, the original specification describes several ranges and subranges. In particular, the original specification discloses that the viscosity of the gel depilatory composition preferably may be more than 500,000 mPa·s and further discloses that the viscosity of the gel depilatory composition is preferably 20,000,000 mPa·s or less. Therefore, it is absolutely clear that the original specification includes a description of the range of viscosity for the gel depilatory composition of from 500,000 to 20,000,000 mPa·s as presently claimed.

Applicants submit that the Office's rejection is not supportable in view of the explicit disclosure of the original specification. The rejection should therefore be withdrawn.

The Office asserted that Claim 35 does not exclude a heat/warming step. The Office pointed to paragraphs [0112]-[0116] of the PG publication of the present application as support for the assertion that there is no disclosure of excluding heat. Applicants submit that there is no requirement that the original specification explicitly exclude a particular component of the claimed invention in order for that component to be excluded from one or more of the claims.

Claim 35 includes the transitional phrase "consisting of." As is explained in § 2111.03 of the M.P.E.P., the use of this transitional phrase signals a "closed claim." A closed claim is one that excludes steps, elements or components not explicitly recited in the claim. Claim 35 does not recite a heating step and therefore a heating step is excluded from Claim 35. If it is the Office's assertion that the original specification does not provide sufficient support for use of the term "consisting of" in Claim 35, Applicants draw the Office's attention to the method of using the gel depilatory composition of the invention described on page 30, line 19 through page 31, line 15, reproduced below for convenience:

When the gel depilatory composition of the present invention is used, the gel depilatory composition is applied to the portion to be depilated and allowed to stand for preferably 2 to 20 minutes and more preferably 3 to 15 minutes to allow the keratin reducing compound to penetrate into body hairs and to reduce the hairs. During the course of treatment, the gel may be peeled a little to confirm the swelling condition of the hairs. After that, the gel is peeled off and the agent is removed together with the hairs cut by washing and wiping.

The gel depilatory composition of the present invention can produce the effect of removing body hairs more greatly by physically warming the body hairs to be depilated by using, for example, a heater or a steaming towel or by allowing heating element, which is made to be contained in the gel depilatory composition, to generate heat thereby chemically warming the portion upon use before or after the sticking. The warming temperature is preferably 40 to 50°C.

As to the portions to be depilated, the gel depilatory composition may be applied to all of the portions, such as hands, legs, the sides and a bikini line for which commercially available depilatories are currently used. Further, the gel depilatory composition may be applied to a face (eyebrow, mustache and downy hair) because of simple operations and low odors.

Applicants submit that the above-quoted disclosure from the present specification is evidence that the original specification discloses a method that includes only the steps and conditions recited in present Claim 35. The method described above does not include other steps. The use of the transitional phrase "consisting of" in Claim 35 is supported by the original specification because the particular method described on page 30, line 19 through page 31, line 8 includes only those steps disclosed and does not include a heating/warming step.

Applicants thus submit that the Office's rejection of Claim 35 is not supportable and should be withdrawn.

The Office rejected Claims 1, 3-5, 7-8, 10-22, 30-36 and 37-42 under 35 U.S.C. § 112, second paragraph for indefiniteness. The Office asserted that the term "a viscosity of

300,000 mPa·s or more" does not define the metes and bounds of the claimed invention because the term "more" is a relative term. Applicants draw the Office's attention to M.P.E.P. § 2173.05(b) which relates to relative terminology. In part, the M.P.E.P. states the following:

The fact that claim language, including terms of degree, may not be precise, does not automatically render the claim indefinite under 35 U.S.C. § 112, second paragraph. (Citations omitted). Acceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed, in light of the specification.

Applicants submit that those of ordinary skill in the art would readily understand that the previously claimed invention is a gel depilatory sheet having a gel depilatory composition with a viscosity of 300,000 mPa·s or greater. The absence of an upper bound for the viscosity of the gel depilatory composition is not evidence that the metes and bounds of the claimed invention would not be understood by those of skill in the art. Obviously there is an upper bound, e.g., that point at which the gel depilatory composition becomes a solid and its viscosity under normal conditions can no longer be meaningfully measured. Such an embodiment is not included in the invention because the invention requires a "gel" depilatory composition.

The Office further asserts that the original specification discloses that the viscosity has an upper limit; namely, 20,000,000 mPa·s. The Office pointed to paragraph [0104] of the PG publication of the present application as support (a portion of this paragraph was reproduced above earlier). Applicants submit that it is readily evident from the disclosure of the original specification that the inventors contemplated an invention having a viscosity of greater than 20,000,000 mPa·s. It is for this reason that the original specification discloses that the "upper limit of the viscosity is <u>preferably</u> 20,000,000 mPa·s or less". Note the use of the word "preferably." The original specification does not in any way suggest that the

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viscosity may not be higher, the original specification merely states that the viscosity is

preferably lower than 20,000,000 mPa·s. Thus, in contrast to the Office's assertion, the

original specification does not state that there is an upper limit for the viscosity of the gel.

As discussed above, Applicants submit that the Office's arguments with respect to the

patentability of Claim 1 under 35 U.S.C. § 112, second paragraph are not legally supportable

and should be withdrawn.

In order to expedite prosecution, Applicants amend the independent claims to include

an upper viscosity limit of 20,000,000 mPa·s and a lower viscosity limit of 500,000 mPa·s.

For the reasons discussed above, Applicants submit that all now-pending claims are in

condition for allowance and respectfully request the mailing of a Notice of Allowance to

acknowledge the patentability of the claimed invention.

Respectfully submitted,

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